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TICOM/I-186

INTERROGATION OF OBERPOSTRAT KURT VETTERLEIN
ON ATTEMPTED TAPPING OF TRANS-ATLANTIC CABLES

Attached is a report of an interrogation of OBERPOSTRAT KURT VETTERLEIN carried out on December 18th, 1945, at the Ministerial Collecting Centre, Fürstenhagen, near Kassel, at the request of TICOM by 1st Lt. Alfred P. Fehl, Sig.C., A.U.S., on the attempted tapping of Trans-Atlantic Cables.

This report was received from H.Q., ASA, Europe under cover of ASA-10/EFC/1 ab,(Main) APO 757, dated 17th January, 1946.

TICOM

4th February,1946

No. of Pages: 4

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18 December 1945

## INTERROGATION OF OBERPOSTRAT KURT VETTERLEIN ON TAPPING OF TRANS-ATLANTIC CABLES

Oberpostrat Dipl. Ing. Kurt Vetterlein was born 21 August 1910 at Hof, Bavaria. He received thorough training at the Technical University in Munich from 1929 to 1934 and from Jan. 1935 to June 1935 was working in the Central laboratory of Siemans and Halske, A.G. Berlin, on the development of long-distance cables. In July he began work at the Referendar (Reichspost) where he was introduced to the broader aspects of the field of communications (telephone, telegraph, and postal administration), and continued in that capacity until August 1937. Afterthe last mentioned date he began to work on developments of repeater-measurings and general research in the field of long distance telephony. During the war he worked in Abteilung III of the Forschungsanstalt of the German Reichspost, a section that was concerned with special technical matters. His problem there dealt with special researches into the physical nature of the human voice, which were directed toward reducing speech distortion in scrambled radio telephony (see Ticom/I-88).

Vetterlein had some acquaintance with the problem of cable tapping and interception, but knew none of it firsthand. That, he said, was the business of Abteilung VIII (Note 1,p.3). The only persons in this department that he could remember were Oberpostrat Dr. K.A. Schmidt, head of the department, and Postrat Rossmüller. Schmidt whose home was in Saalfeld and who was an Oberleutnant in the Luftwaffe, was probably a prisoner of war in the Russian zone; Rossmüller was in Munich in May 1945 (Note 2, p.3)

Abteilung VIII had conducted some experiments in the finding and tapping of cables in the Baltic Sea. As a result of the experiments, it was assumed that outgoing cable telegrams could be successfully intercepted 50 km. from the shore. So far as Vetterlein knew, two methods of finding cables were used: the magnetic method, by which an inoperative cable can be located; and the inductive method which can be used in locating a cable through which current is flowing (Note 3, p4 ).

No actual cases of the tapping of long-distance cables were known to Vetterlein. He was told that it was planned to find the cables to America on the southwest coasts of England and Ireland, and if possible to tap and intercept them or destroy them. This was to be done by dropping from a submarine a coil, which could be used both for finding and interception (Such und Abhörspule), near to the cable.

What was intercepted was then to be sent to an intelligence centre either by courier boat or by radio. In the latter case, there was always the danger that the position of the boat would be given away by the outgoing radio signals. In any case, however, RADAR had been perfected to such an extent that German authorities concerned felt that the submarine would soon be discovered and destroyed. In Vetterlein's opinion, this is why the project was not pursued with greater energy.

All plans on foreign cables of which Vetterlein was told had to do with telegraph lines. He never heard of similar plans on telephone cables. He had also heard that the German Navy worked on the tapping of foreign cables, but could offer no information or names connected with it.

## Supplementary Notes

1. The RPF (Forschungsanstalt der Deutschen Reichpost) was divided into twelve sections:

| | | |
|---|---|---|
| Abteilung | I | Allgemeine Verwaltung |
| " | II | Patent Angelegenheiten |
| " | III | Technische Sonderfragen |
| " | IV | Elektronenoptik (Fernsehen) I |
| " | V | " " II |
| " | VI | " (später: Gernsteuerung) |
| " | VII | Dezimeterwellen |
| " | VIII | Leitungsubertragungstechnik |
| " | IX | Hochfrequenztechnik |
| " | X | Wellenausbreitung |
| " | XI | Kernphysik |
| " | XII | Akustik |

2. Herr Enno Randohr, custodian of RPM personnel records at the Ministerial Collecting Center, Kassel, later gave the following information concerning these men:

Oberpostrat Dr. Ing. Karl Otto Schmidt, Naumburg (Saale): Reichspostdirektion, Leipzig.

Postrat Dipl. Ing. Johann Ludwig Georg Rossmüller, Munchen: Reichspostdirektion, Munich

More Abteilung VIII names and addresses were furnished by Telegrapheninspektor Camrath of the RPF (Abteilung III):

Postrat Nebel, Oldenburg: Oberpostdirektion, Bremen
Oberpostrat Schreiber, Oldenburg: Oberpostdirektion, Bremen
Obertelegrapheninspektor Mousse, Oldenburg: Oberpostdirektion, Bremen
Min. Rat. Korapp, Salzuflen, Reichspostministerium. (RPM).

3. Vetterlein was reluctant to elaborate here since, he said, he knew so little about it. He did finally attempt to give further information on the subject, however, in the following manner:

a) Magnetic System.

"The search coil is built around a gapped iron core. If the search coil passes near the cable an impulse of current is induced in the coil by the alteration of the magnetic field. This can be made visible by amplification in a D.C. amplifier and the position of the cable thus indicated, (by means of a galvanometer, for instance)."

b) Inductive System.

"The cable or cable sheath currents (or the return currents in the water) induce E.M.F's in the search coil.

Conditions: strong cable currents, such as those present at the transmitting station, otherwise such low voltages are induced that, in view of the noise of the amplifier itself, they cannot be sufficiently amplified."

4. Vetterlein's present home address is Santhofen (Bavarian Allgäu) Bismarck Str.5. News of his discharge or further disposition from the Ministerial Collecting Centre is expected in the near future.